

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION
Fact Sheet No. 1 For Dairies**

Does Your Dairy Need An NPDES Stormwater Permit?

Federal law and regulations require that certain dairies have a National Pollutant Discharge Elimination System (NPDES) permit issued under the federal Clean Water Act. This fact sheet provides information to help you determine if your dairy must have an NPDES stormwater permit. In the discussion below, an "Animal Unit" (AU) is 1,000 pounds of animal(s), and "surface water" is a water of the state.

Question: *What are the typical surface water quality problems associated with a dairy?*

Answer: Wastewater from a dairy is high in nitrogen, ammonia, salts, and organic material (manure and other solids). When nitrogen and ammonia are discharged to a creek or stream, they can be poisonous to the plants and animals living in the waters. Organic material can reduce or remove the dissolved oxygen in a creek or stream, thereby suffocating the fish that live there. In addition, manure, like any other waste produced by warm-blooded animals, contains bacteria that could pose a threat to human health and/or sources of drinking water. Any of these pollutants, if discharged from a sewage treatment plant to surface water, would be regulated by an NPDES permit.

Question: *When does a dairy need an NPDES stormwater permit?*

Answer: A dairy is required to have an NPDES stormwater permit if it has the potential to discharge to surface water, and:

1. the dairy has over 1,000 AU (more than 700 or more milk and/or dry cows) confined or corralled for 45 or more days during any 12 months period, or
2. the dairy has 301 to 1,000 AU (200 to 700 milk and dry cows) and animal waste was discharged to surface water through a man-made conveyance (ditch, pipe, etc.), or was discharged into a surface water drainage course passing through the dairy (originating and ending outside the dairy), or
3. the dairy has been designated as a concentrated animal feeding operation (CAFO) by the Regional Water Quality Control Board (Regional Board) as a potential or actual significant contributor to pollution of surface waters.

Question: *Can a dairy be exempt from obtaining an NPDES stormwater permit?*

Answer: Regardless of herd size, a dairy does not need an NPDES stormwater permit if it is managed such that discharges to surface water occur only during storm events greater than the 25-year 24-hour storm event. (The 25-year 24-hour storm event is rainfall in a 24-hour period expected to occur once every 25 years.)

Question: *How does a dairy operator determine the size of the 25-year 24-hour storm?*

Answer: The National Oceanic and Air Administrator of the National Weather Service has determined the water amounts in a 25-year 24-hour storm. For example, in the San Joaquin Valley, the 25-year 24-hour storm will generate about 2.5 inches of rain. Contact your local weather service or the local office of the National Resources Conservation Service to obtain actual rainfall values for your area. County building and road departments also often have this information.

Question: *How can a dairy operator determine whether the dairy qualifies for an exemption?*

Answer: Many waste ponds may not be large enough too contain: (1) the runoff generated by the 25-year 24-hour storm event, (2) the runoff generated by rain prior to the 25-year 24-hour storm, and (3) any process washwater generated on-site, and still maintain adequate freeboard in the ponds. If you have determined how much storage capacity you need to contain the 25-year 24-hour storm, previous rainfall runoff, and washwater, and your pond system always has this much capacity with adequate freeboard, then you may qualify for an exemption.

Question: *How is an NPDES stormwater permit obtained?*

Answer: Contact the dairy regulatory staff at your Regional Board office listed below. They can assist you in determining what type of NPDES permit (stormwater of individual) is most appropriate for your dairy.

Question: *If a dairy has an NPDES stormwater permit, what is it allowed to do during severe weather conditions?*

Answer: The NPDES stormwater permit allows a properly operated dairy to discharge from its waste management system during periods of continuous rain or catastrophic events in order to prevent overtopping of the pond or other waste system failure. The discharge should cease as soon as conditions allow the waste to be retained on the dairy and associated cropland. Such a discharge by a dairy with an NPDES stormwater permit is not a violation of the federal Clean Water Act. Violators of the Clean Water Act are subject to fines up to \$27,500 a day. They may also be sued by a third party for these violations.

Example: Dairy A has an NPDES permit and a waste handling system with the ability to collect and contain the volume of runoff expected to be generated by a 25-year 24-hour storm event. It rains heavily for three weeks (a chronic rainfall), but the rainfall in any 24-hour period never exceeds the 25-year 24-hour storm value. Dairy A's waste handling system reaches capacity and discharges to waters of the United States. That discharge is not considered a violation of the Clean Water Act.

Dairy B is identical to Dairy A, except that Dairy B does not have an NPDES stormwater permit. Dairy B's discharges to the waters of the United States during a chronic storm event would be a violation of the Clean Water Act with potential penalties up to \$27,500 for each day of violation.

Even if a dairy is not required to have an NPDES stormwater permit, it may be in your best interest to have one. Also, dairy operators should be aware that in addition to the NPDES program they are subject to regulation under California's Water Code (see Fact Sheets No. 2 and No. 3 for Dairies). For further information, or to obtain an application for an NPDES permit (the General Industrial Stormwater Permit form), contact the Regional Board dairy regulatory staff at one of the following offices:

- Sacramento (916) 255-3000
- Fresno (559) 445-5116
- Redding (916) 224-4845